

Notice of Allowability

Application No.

10/066,938

Applicant(s)

NDZEBET, ERNEST

Examiner

Kallambella Vijayakumar

Art Unit

1751

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Application filed 02/04/2002.
2. ☒ The allowed claim(s) is/are 1-18.
3. ☒ The drawings filed on 04 February 2002 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 1/2
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 04/05/2004.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


Mark Kopeck
Primary Examiner

EXAMINER'S AMENDMENT

- An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Adam J. Forman on March 05, 2004.

The application has been amended as follows:

In Claim-11, Line-2

AFTER 'of'

DELETE

'Teflon T-30'

and **REPLACE** with

--polytetrafluoroethylene—

In Claim-17, Line-7

AFTER 'oxide'

DELETE 'compound' and

REPLACE with

--particles—

REASONS FOR ALLOWANCE

- The following is an examiner's statement of reasons for allowance:
 - Claims 1-18 are allowed as amended over the prior art of record that neither teaches nor fairly suggestive of a method of producing cathode mixture having manganese oxide particles and a method of producing cathode having manganese oxide particles, specifically by mixing a sol of manganese oxide with the carbon slurry forming a carbon slurry with suspended manganese oxide particles, meeting the limitations of the instant claims by the applicants.
 - The closest prior art of record by Golovin (US Patent 6,644,609) teaches making of manganese oxide sol by the hydrolysis of Mn-alkoxides in an alcoholic solution, gelling the obtained manganese oxide sol; mixing with activated carbon with the gel; and further pyrolyzing the mixture in an air between 150-250°C forming a metal-air electrode. Golovin differs from the applicants in neither teaching nor suggestive of forming the sol of manganese oxide by reducing a manganese salt using an organic and/or adding manganese oxide sol to a dispersion/slurry of carbon forming a carbon slurry/dispersion with suspended manganese oxide particles per the limitations of the instant claims by the applicants.
 - Xu et al (US Patent 6,465,129) teach forming manganese oxide sol by treating an aqueous solution of sodium manganate with organic reductants, wash and isolate the particles of manganese oxide and mix with carbon powder and a binder forming pellets. Xu et al differ from the applicants in neither teaching nor suggestive of forming a sol of manganese oxide by reduction of a manganese salt using an organic

with a single carbon atom and/or adding manganese oxide sol to a dispersion/slurry of carbon forming a carbon slurry/dispersion with suspended manganese oxide particles per the limitations of the instant claims by the applicants.

- Prior art of record neither teaches nor fairly suggestive of the limitations of the instant claims by the applicants.
- Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."
- Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kallambella Vijayakumar whose telephone number is 571-272-1324. The examiner can normally be reached on M-Th, 07.00 - 16.30 hrs, Alt. Fri: 07.00-15.30 hrs.
- If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Yogendra Gupta can be reached on 571-272-1316. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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- Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kmv

March 05, 2004.


Mark Kopec
Primary Examiner